



Vegetation Management Planning

Introduction

Vegetation management in a National Park is often a very complex undertaking. Multiple objectives for park vegetation exist such as maintenance or restoration of natural ecosystem conditions or maintenance of landscapes to portray conditions at particular periods of historic or prehistoric significance. Meeting these objectives may be confounded by natural processes such as fire and disturbance caused by storms or by the invasion of non-native insects, disease, and plantlife.

In an effort to ensure that park staff members at Shenandoah National Park are "headed in the right direction" as it relates to vegetation management, a Vegetation Management Planning effort has been launched. This project should result in development of descriptions of desired future conditions of plantlife that are applied to a zoning system. Park staff will also develop strategies and tactics for achieving desired future conditions.



The Big Meadows cultural landscape shown here also contains a globally rare wetland plant community.

Management Needs

Vegetation management in a park setting often involves numerous conflicting philosophies and approaches. Examples of this include the conflict between the desire to restore fire return intervals to natural communities through prescribed fire that may be contrary to the interest in controlling the spread of exotic plants which may occur post-fire. Another example is the conflict between the desire to remove vegetation that is obstructing historic scenic views at overlooks along Skyline Drive but opening of the forest canopy encourages the spread of exotic plants.

These kinds of conflicting circumstances emerge repeatedly in day-to-day management of the park yet no guidance is available to park staff to help sort out which values or objectives are most important at a given location. The vegetation management planning effort is intended to help sort this out.



View of smoke plume from the Shenandoah Complex Fire in 2000.

Accomplishments

Park staff members have convened several interdisciplinary scoping meetings at which the vegetation management issues have been discussed. Currently the staff is working with a cooperator from Pennsylvania State University who will help make decisions about how to partition the park into vegetation management zones and then prepare statements of desired future conditions for each of those zones.

Initially emphasis will be placed on clarifying the relationship of fire to vegetation management. Consideration will be given to fire as a management tool useful in achieving a non-fire related future condition and to fire as a process that is integral to ecosystem conditions and therefore part of a desired future condition.

Development of this information should be very useful in eventual preparation of a revised General Management Plan and Resource Stewardship Strategy for the park.



*Park staff apply herbicide to kill the invasive exotic Japanese stilt grass (*Microstegium vimineum*) near rare plants in the Big Meadows Swamp rare plant community.*